$$V = V_0(1 + \alpha \Delta t)$$

$$p \cdot V = N \cdot k\, T$$

$$p = \frac{F}{S}$$

$$T = t + 273$$

$$\frac{N}{m^2} = 1\,Pa$$

$$0 = t + 273$$

$$t = -273\,^\circ C$$

K_B = costante di Boltzmann

$$K_B = 1{,}38 \cdot 10^{-23}\ \frac{Pa \cdot m^3}{T}$$

$$n = \frac{N}{N_A} \Rightarrow N = n N_A$$

$$p \cdot V = n(N_A \cdot k)\,T$$

$$R = 8{,}314\ \frac{Pa\,m^3}{n^\circ moli \cdot K}$$

↳ costante dei gas perfetti

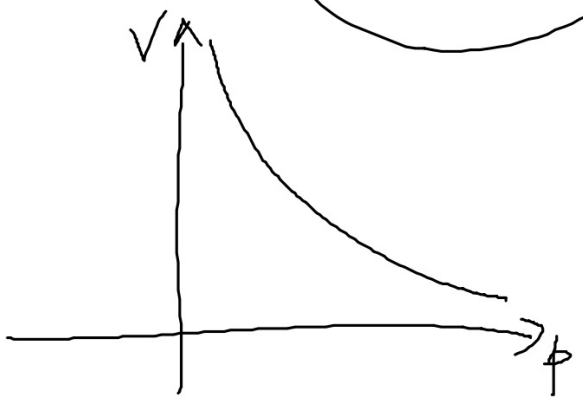
$$pV = nRT \qquad R$$

$\longrightarrow T = \text{costante}$ legge di BOYLE

$pV = nRT$

$pV = \text{costante}$

$p_0 V_0 = p_f V_f$



p = costante

1ª legge di GAY-LUSSAC

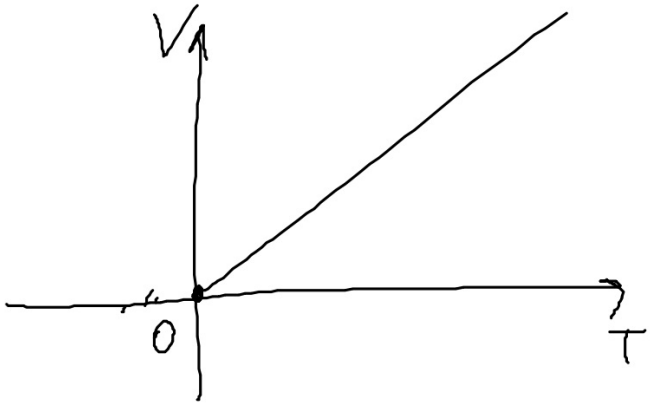
$pV = nRT$

$\frac{V}{T} = \frac{nR}{p} = k$

$\frac{V}{T} = kT$

direttamente proporzionali

$\frac{V_1}{T_1} = \frac{V_2}{T_2}$

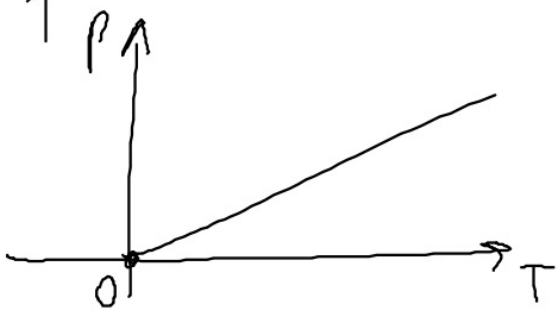


2ª legge di GAY-LUSSAC

V = costante

$$pV = nRT \Rightarrow \frac{p}{T} = \frac{nR}{V} = k$$

$$\frac{p_0}{T_0} = \frac{p_f}{T_f} \qquad \frac{p}{T} = k \qquad p = kT$$



T = cost ISOTERMA

p = cost ISOBARA

V = cost ISOCORA